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FDI/ARCS# 1894

U. S. Environmental Protection Agency
Attn: Ms. Stacey Bennett
Work Assignment Manager
Region VI
1445 Ross Avenue
Suite 1000
Dallas, Texas 75202

CONTRACT NO. 68-W9-0013
NARRATIVE SUMMARY FOR
MILES ROAD LANDFILL
TXD # 980697072, GARLAND, TX
SITE INSPECTIONS
WA # 25-6JZZ

Dear Ms. Bennett:

Please find enclosed the referenced narrative summary and attached CERCLA Eligibility Questionnaire.
Please contact myself or Jonathan Stewart if you have any questions regarding this document.

Sincerely,

William Walters
for William Walters
ARCS Project Engineer

Mark L. DeLorimier
Mark L. DeLorimier, P.E.
ARCS Program Manager

WDW/MLdL:ska

pc: File

MILES ROAD LANDFILL NARRATIVE SUMMARY
Garland, Texas
CERCLIS ID TXD 980697072

SITE DESCRIPTION AND HISTORY

The City of Garland Miles Road site is an inactive landfill located in Garland, Dallas County, Texas, northeast of Miles Road, east of Pleasant Valley Road, and west of Castle Drive. The geographical coordinates of the center of the site are 32°56'31" north latitude and 96°34'46" west longitude (Ref. 1, 2).

The site encompasses 45 acres (Ref 2). The site has one owner, Joel Vaughn McCallum (Ref 4), who currently grazes sheep on this property (Ref. 5). Site fencing, used to contain the sheep, would discourage unauthorized site access. The landfill was exclusively filled with municipal solid waste, no liquid or hazardous waste was accepted (Ref 2). The City of Garland, who leased the property, disposed approximately 67,000 tons of refuse into the landfill from February 1973 to June 1975 (Ref 2). The landfill had a 3 foot final cover of topsoil applied after disposal activities ceased (Ref. 5). Although the site does not have an engineered liner, the site is noted to have a natural clay liner (Ref 10). No leachate controls, gas extraction, or other landfill controls exist at the site.

The site drains to the west into Rowlett Creek, which is 1/2 mile from the westernmost portion of the site. Rowlett Creek outlets 3.3 miles south from the probable point of entry (PPE) into Lake Ray Hubbard. Lake Ray Hubbard is used as a main water supply for the City of Dallas. Lake Ray Hubbard was formed by damming of the east fork of the Trinity River. The 15 mile downstream segment ends on the east fork of the Trinity River south of Lake Ray Hubbard. The site is outside of the 500 year floodplain (Ref 9).

There are no municipal water wells in the City of Garland (Ref 6). The City of Garland receives its water by pipeline from Lake Lavon. The City of Garland historically used groundwater for its municipal water source; however, groundwater has not been used since 1960. All municipal wells were abandoned and filled with sand and concrete. The depth to groundwater for these wells (3,200 feet) and groundwater temperature discouraged its further use (Ref 6).

There are no federal or state designated sensitive environments near the site (Refs 7, 8). No federal or state designated endangered or threatened species are known to use land within 4 miles of the site; or exist in, or regularly use water from, the surface water pathway (Ref 7, 8). The Texas Garter snake is a state Category 2 (under review) species and may inhabit terrestrial areas within 4 miles of the site.

The United States Environmental Protection Agency (EPA) identified the Miles Road landfill as a potential Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site upon receipt of the CERCLA "Potential Hazardous Waste Site Identification and Preliminary Assessment" report filed by the Texas Department of Health on February 24, 1981 (Ref 2).

No samples are known have been taken from this site at any time that have been analyzed for hazardous constituents. Samples have been taken from the 13 monitoring wells on the active

MILES ROAD LANDFILL NARRATIVE SUMMARY

Page 2

landfills (Castle Drive Landfill TXD980626766 and Castle Drive & Miles Road Landfill TXD980750368) across Miles Road from the site (Ref 6). Only one of these samples was analyzed for metals and no significant levels of hazardous metals were found. The City of Garland visually inspects this landfill every six months and to date there have been no signs of release (Ref 5).

IDENTIFIED OR POTENTIAL PROBLEMS

The Texas Department of Health "Potential Hazardous Waste Site Identification and Preliminary Assessment" report notes that the landfill only accepted municipal solid waste (Ref 2). This form additionally notes that site control was probably adequate and no hazardous waste problem is anticipated for this site (Ref 2). However, if the landfill had received significant amounts of hazardous waste, hazardous material would have the potential to be released through any of the normal migration routes.

QUESTIONS AND DATA GAPS

The information available for this site is limited; therefore, there are many questions and data gaps. It is expected that some of the site questions will go unanswered and some data gaps cannot be filled using referenceable sources. However, an attempt will be made to answer all site questions and fill all of the site data gaps during the site reconnaissance, sampling event, and through additional contact with the State of Texas, the Dallas County, and the City of Garland. A list of the most important site questions and data gaps is given as follows:

Landfill Data

- Are there significant levels of hazardous constituents at the site or migrating from the site?
- What is the current physical status of the site? What is the depth of the waste? What is the total volume of the waste?
- Additional site history would be helpful to fully characterize the site (Were there any other historic activities conducted on this site? Was fuel stored on-site for the earth moving equipment used at the site? Were any other chemicals used on-site for equipment cleaning, etc.?)
- Are there any obvious stains or other peculiar surface features associated with the site?

MILES ROAD LANDFILL NARRATIVE SUMMARY
Page 3

- What is the state of the vegetation at the site?

Groundwater Pathway Data

- Are there any municipal groundwater wells within a four mile radius of the site? If any, what population do they serve? How many private wells are within a four mile radius of the site? Are these private wells used as a resource (i.e. for agriculture, livestock, etc.), as potable water, or both?
- What is the depth to groundwater? What is depth of aquifers currently being used within 4 miles of the site? What are the aquifer interconnections?
- What is the soil permeability from the surface to the highest used or interconnected aquifer? What is the thickness of the least permeable layer?
- Does groundwater connect with surface water within 1 mile of the site?

Surface Water Pathway Data

- What is the flow rate of Rowlett Creek? Are there any beneficial uses for the water from Rowlett Creek in the segment from the PPE to its discharge into Lake Ray Hubbard?
- What is the total annual surface water and groundwater recharge into Lake Ray Hubbard?
- Where are the water intakes located in Lake Ray Hubbard? What population does Lake Ray Hubbard serve? What kind of water treatment is performed on water taken from the lake prior to its distribution? Is there any available water quality data for hazardous constituents?
- What is the flow rate of the east fork of the Trinity River south of Lake Ray Hubbard? Are there any beneficial uses for the water from the east fork of the Trinity River from Lake Ray Hubbard to the end of the 15 mile downstream segment?
- Is Rowlett Creek fished? If yes, what is the fish productivity (how many pounds of fish are taken annually) in Rowlett Creek from the PPE to its discharge into Lake Ray Hubbard? What is the fish productivity in Lake Ray Hubbard? Is the east fork of the Trinity River fished? If yes, what is the fish productivity in the east fork of the Trinity River from Lake Ray Hubbard to the end of the 15 mile segment?
- What is the total length of wetlands along the surface water pathway?

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- What is the population within 200 feet of the site?

- Is there any evidence of biogas release from the landfill?
- What is 4 mile radius population profile surrounding the site?
- What is the acreage of wetlands within a 4 mile radius of the site?

1. U.S. Geological Survey, 7.5 minute topographic map, Rowlett, Tex., 1959 (photorevised 1968 and 1973).
2. Texas Department of Health, "Potential Hazardous Waste Site Identification and Preliminary Assessment", February 24, 1981.
3. Texas Department of Health, "Potential Hazardous Waste Site Final Strategy Determination", February 24, 1981.
4. Record of Telephone Conversations between Tom Casabonne, Fluor Daniel, and the Dallas County Tax Office (various personnel). March 22-30, 1993.
5. Record of Telephone Conversation between Tom Casabonne, Fluor Daniel, and Ken Smith, Landfill Director City of Garland Sanitation Department. March 16, 1993.
6. Record of Telephone Conversation between Josh Sacker, Fluor Daniel, and Jack May, City of Garland Water Department. April 8, 1993.
7. Record of Telephone Conversation between Josh Sacker, Fluor Daniel, and Jeff Reed, U.S. Fish & Wildlife Service Ecological Division. April 7, 1993.
8. Record of Telephone Conversation between Josh Sacker, Fluor Daniel, and Dorinda Sullivan, State of Texas Parks & Wildlife. April 7, 1993.
9. Federal Emergency Management Agency, Flood Insurance Rate Maps, Garland, Texas, Community-Panel Number 485471 0010 D, Map Revised Date August 15, 1990.
10. Record of Telephone Conversation between Tom Casabonne, Fluor Daniel, and Ken Smith, Landfill Director City of Garland Sanitation Department. April 5, 1993.